

Workplace Safety and Health Worker Performance In Uganda:

A Case of Kilembe Hospital, Kasese District, Uganda

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Abstract

The study examined the effect of workplace safety on health worker performance at Kilembe Hospital, Uganda. The study adopted a cross-sectional survey research design with mixed methods approach. A sample size of 152 respondents was considered for the study, 130 respondents participated, giving a response rate of 85.5%. The content validity index was calculated from the questionnaire and it was 0.94 while the computed Cronbach's alpha coefficient is 0.922 which is above 0.7 considered indicative of acceptable internal consistency therefore the questionnaire was deemed reliable. For qualitative data, to ensure consistency the KII and documentary review were guided by the research objective and question to keep the study focused. The study found that there was inadequacy of PPEs at Kilembe hospital which exposes health workers to risks of contracting diseases from patients and it was also found out that some of the hospital equipment were not functioning properly. This demotivates health workers and hence deters them from executing their mandate effectively. The study therefore, recommended that Ministry of Health should advocate for budget increment in order to enable them supply enough PPEs to hospital and the need for Government of Uganda through the Ministry of Health to partner with Civil Society Organization to fund some of the health budget for example repairing of hospital equipment.

Keywords: Workplace Safety, Health Worker, Performance, Risks, Disease.

Introduction

Kilembe Healthcare workers are regularly exposed to a wide range of hazards in the course of their work and no health system can keep its patients safe unless it keeps its health workers safe, therefore workplace safety measures are fundamental for well-functioning and resilient health systems, quality of care and maintaining a productive health workforce (World Health Organization, 2018). Thus, the primary objective of workplace safety management is to prevent or reduce injury and disease burden to a worker and employer as a result of work. This concurs with Reese (2018), who observed that protecting health and safety of health workers include development of norms and standards for prevention of occupational risks in the health sector, provision of well-functioning equipment, developing and implementing occupational health programmes for health workers, provision of personal protective equipments (PPEs) and job aids. Reese (2018) further indicated that protection of health workers from work place health hazards and injuries improves and sustains their motivation and enables health workers to perform effectively, making best use of their knowledge, skills and competences and the available resources in order to provide high-quality health services.

Furthermore, Yassi et al., (2018) observed that the fundamental function of workplace safety measures is to ensure that people stay safe and healthy in the workplace to increase worker's capacity to perform, and work safety standards instituted by organizations should aim at the promotion and maintenance of the highest degree of physical, mental, social wellbeing of workers in all sectors that have an impact on the health of employees

and their performance. The study utilized participant-observation methodology, and this current study utilized a mixed method approach by collecting respondents' opinions on interviews and quantitative using questionnaires thereby generating triangulated findings.

Healthcare-associated infections have been and remain a major threat to health delivery and Standard Operating Procedures (SOPs) have been seen as an efficient tool in ensuring safety for patients and staffs within the hospital environment (Peres, 2022). SOPs in health units enhance health service delivery through provision of detailed, written instructions to achieve uniformity in the performance of specific functions and adhere to policies, designed for the individual's care and provider organisations thereby enhancing workers' performance. Furthermore, Palluzi (2021) noted that the development and use of standard operating procedures are an intrinsic part of a successful quality system as it provides individuals with the information to perform a job properly, and facilitates consistency in the quality and integrity of a product or end-result.

Similarly, a study conducted by Omoit, Otieno and Rucha (2020) noted that poor compliance to health systems guidelines and standards are associated with a dismal performance and it contributes greatly, to high number of deaths, injury, medical errors, patients harm and ineffective care. Data was collected using self-administered questionnaires thereby missing out the explanation behind the statistical data, and therefore, the current study collected both quantitative and qualitative data thereby uncovering underlying trends in thought and opinions. According to Yáñez-Benítez et al. (2020), mandatory use of personal protective equipment (PPE) has resulted in a significant reduction in the infection rate among health care workers and enhanced their performance. Yáñez-Benítez et al. (2020), further state that PPE can be classified in different ways and includes at least wearing a pre-fitted appropriate size N95 face mask, gloves with or without protective eyewear (well-fitted goggles or face-shield), and gowns. Studies have concluded that health workers felt safe when putting on PPE which enhanced their productivity, however they come with undeniable negative impact on the front-line healthcare workers such as PPE-related discomfort (Alarfaj et al., 2021).

Job aids are repositories for information, processes, or perspectives that are external to the individual and that support work and activity by directing, guiding, and enlightening performance and according to Kitur, (2019), a job aid serves as a reference tool for the health care worker. Job aids are effective when they include correct and well-communicated information in a format useful to the health care worker and are available at the time and location the health care worker needs it. To achieve excellent health worker performance, Kozuki and Wuliji (2018) noted that job aids have been cited as effective in enhancing health worker performance and a highly cost-effective tool to improve health care delivery. However, the study further noted that the studies on effectiveness of job aids on health care worker performance and productivity is limited, they do serve as a useful and timely prompt that can streamline service delivery processes and potentially improve efficiency.

It is evident that workplace safety significantly contributes to the improvement in health worker performance (Reese, 2018; Omoit, Otieno & Rucha, 2020). Nevertheless, limited study has been done in the health sector of Uganda and this unsettled debate warrant further research to get empirical evidence on how workplace safety affects health worker performance in Kilembe Hospital, Kasese District, Uganda.

Statement of the Problem

A well performing health workforce is a significant component of a strong health system that together with other social determinants can improve the health status of the population. Work environment plays a major role in the performance of a health worker and determines how the health workforce operates in ways that are reasonable, responsive and efficient to achieve favorable health outcomes (Krijgheld, Tummers & Scheepers, 2022). In the same pursuit, Kilembe Hospital has put in place effective work environment for its employees intended to secure their commitment to their work and enhance their performance. Such work environment practices include but not limited to management skills, performance feedback, resource mobilization, functional equipments, Standard Operating Procedures (SOPs), Personal Protective Equipments (PPEs), Job aids, and training programmes (KNRH, 2021). The presumption is that the work environment will enable effective timely occupation execution, incentivize employees to be committed to the organization, have the willingness to help the organization achieve its goals, increase efficiency of employees and ensure presentism by increasing employee willingness to be available for work and stay as member of the organization. Despite the good work environment practices above, Kilembe Hospital is still faced with employee performance challenges. In the period between 2017- 2021 for example, health workers were accused of absenteeism and untimely provision of services to their clients, low productivity, poor attitude toward clients and poor quality of health care services provided to clients (BMAU, 2021). Even with supervision support, learning opportunities and work place safety strategies in place, Kilembe Hospital working environment is associated with high absenteeism, high workers stress levels, low job commitment and personal loyalty, and high turnover affecting achievement of its strategic objectives (MOH, 2021).

If this low health worker performance continues unabated, Kilembe Hospital runs a risk of disruptions in provision of patient care, raise mortality rate and wastage of health resources, as well as a general decline in belief and confidence in the health worker's competence and compromised quality of healthcare and patients' access to care. It is against this background that the study seeks to investigate how workplace safety affects health worker performance at Kilembe Hospital, Kasese District, Uganda.

Objective of the Study

The objective of the study was to examine the effect of workplace safety on health worker performance at Kilembe Hospital.

Research Question

How does workplace safety affect health worker performance at Kilembe Hospital?

Research Hypothesis

This study tested the following hypothesis;

Workplace safety significantly affects health worker performance at Kilembe Hospital.

Methodology

The study adapts a cross-sectional survey research design. A cross-sectional survey design was preferred because it enables collection of data or information at a given point in time (Bakker, 2018). The researcher used a cross-sectional survey because of the limited time it will involve to conduct the study. Besides, it is less expensive to conduct cross sectional studies compared to other studies (Spector, 2019). The study also adopted a

questions to enable generalization of findings and implications of the researched issues to the whole population (Dawadi, Shrestha & Giri, 2021). Whereas the quantitative paradigm was used to obtain numerical data thereby enabling generalization of findings, the qualitative approach was used to provide a deeper and broader understanding of the phenomenon (Rohr, 2022). Study population in this study refers to a group of people about which the researcher will wish to make broad generalizations and where inference could be made (Kowalczyk, 2018). The study population was 190 health workers at Kilembe Hospital consisting of one (1) Director, ten (10) top management employees, and 180 health workers at Kilembe Hospital including Doctors, Nurses, Clinical Officers, Hospital Administrators, and other health workers. Furthermore, this population was selected because it is these people that are at the frontline of health service delivery in the hospital environment, where better performance can be attained. It is also these people that are most relevant to the study topic in terms of expertise. The study sample size was 152 determined using the Krejcie and Morgan's (1970) table for sample determination cited from Amin, (2005). These respondents were selected from population categories as indicated in Table 1 below.

Table 1: Showing study population, Sample size, and Sampling technique

Population Category	Study Population	Sample size	Sampling Technique
Directors	1	1	Purposive sampling
Top Management	10	10	Purposive sampling
Doctors	18	17	Simple random sampling
Clinical Officers	5	05	Purposive sampling
Nurses	116	86	Simple random sampling
Laboratory technicians	01	01	Purposive sampling
Other health workers	39	32	Simple random sampling
Total	190	152	

Source: Kiruddu National Referral Hospital Staff list, (2022)

Results

The study used twelve statements in the questionnaire that required respondents to indicate their Level of agreement or disagreement in order to understand the respondents' perceptions of how work place safety affect health worker performance and analyze whether it had an impact on health worker performance at Kilembe hospital, Kasese District, Uganda. The quantitative findings shown in Table 2 were supplemented by qualitative data gathered utilizing the interview guide.

Table 2: Descriptive results on how workplace safety affect health worker performance at Kilembe Hospital

Statement on Workplace safety		SDA		DA		NS		A		SA		Mean	Std. Dev
		Fre	%	Fre	%	Fre	%	Fre	%	Fre	%		
The hospital has functional equipment to provide quality healthcare		6	5.2	84	72.0	1	0.9	6	5.2	00	0.0	4.07	1.640
The hospital has well defined processes and standard operating procedures for each laboratory activity		15	12.9	0	0.0	0	0.0	5	4.3	96	82.8	4.44	1.347
The hospital has uniform procedures and methods for performing tasks		1	0.9	8	6.9	0	0.0	91	78.4	13	11.2	3.47	1.091
The SOPs are periodically reviewed and updated at the hospital		114	98.3	0	0.0	0	0.0	0	0.0	2	1.7	1.07	0.523
The hospital adequately supplies PPEs to the health workers		104	89.7	0	0.0	2	1.7	0	0.0	10	8.6	1.38	1.147
The hospital provides comprehensive training on PPEs proper use		49	42.2	0	0.0	3	2.6	1	0.9	63	54.3	3.25	1.960
The hospital regularly communicates updates and guidelines to		45	38.8	1	0.9	2	1.7	0	0.0	68	58.6	3.39	1.946

Statement on Workplace	SDA		DA		NS		A		SA		Mean	Std. Dev
healthcare workers												
The hospital has reference materials that support health workers in their day-to-day activities	73	62.9	10	8.6	1	0.9	39	33.6	9	7.8	3.40	1.892
There are clear and ease to follow job aids in the hospital	1	0.9	95	81.9	1	0.9	1	0.9	18	15.5	2.33	1.473
The MOH organogram is clearly defined in terms of lines of authority and responsibility	00	0.0	32	27.6	1	0.9	73	62.9	10	8.6	3.21	1.762
Management provides feedback to the officers about the operation of the system	87	75.0	10	8.6	1	0.9	0	0.0	18	15.5	1.72	1.448
Staffs are given up to date internal control manuals for reference purposes	16	13.8	32	27.6	1	0.9	0	0.0	67	57.8	3.60	1.673

Source: Primary data 2023

The results in Table 2 revealed that 77.6% of the respondents were in disagreement; 72.4% strongly disagreed and 5.2% agreed to the statement that Kilembe hospital has functional equipment to provide quality healthcare. This implies some of the hospital equipment are not functioning properly.

Furthermore, majority of respondents at 87.1% were in agreement with the statement that the Kilembe hospital has well defined processes and standard operating procedures for each laboratory activity where 82,8% strongly. Similarly, 89.5% of the respondents were in agreement; 78.3% strongly agreed and 11.2% agreed to the

statement that the hospital has uniform procedures and methods for performing tasks. This implies that all health workers at Kilembe hospital follow uniform procedures and methods for performing tasks.

Besides the above, 98.3% of respondents strongly disagreed to the statement that the hospital adequately supplies PPEs to the health workers and likewise 89.7% of the respondents strongly disagreed to the statement that the hospital adequately supplies PPEs to the health workers. This implies that there is inadequacy of PPEs at Kilembe hospital which exposes health workers to risks of contracting diseases from patients.

However, there was a mixed reaction among the respondents where 54.3% strongly agreed while 42.2% strongly disagreed on the statement that the hospital provides comprehensive training on PPEs proper use.

On contrary, the findings in Table 4.6 indicated that 58.6 % of respondents strongly agreed while 38.8% strongly disagreed to the statement that the hospital regularly communicates updates and guidelines to healthcare workers. In the same regard, 56.9% strongly agreed while 33.6% strongly disagreed to the statement that the hospital has reference materials that support health workers in their day-to-day activities.

81.9% of the respondents indicated disagreement that there are clear and ease to follow job aids in the hospital. This implies that there are limited clear and ease to follow job aids at Kilembe hospital

Majority of the respondents strongly agreed at 71.5% to the statement that the MOH organogram is clearly defined in terms of lines of authority and responsibility and 75% strongly disagreed to the statement that management provides feedback to the officers about the operation of the system.

Lastly, 57.8% strongly agreed to the statement that staffs are given up to date internal control manuals for reference purposes and 31.4% strongly disagreed to the statement.

The quantitative findings were supplemented by findings from a qualitative data where the researcher conducted interviews and documentary review in respect of workplace safety at Kilembe hospital as discussed below:

Regarding whether the hospital adequately supplies PPEs to the health workers. One of the key respondents was quoted saying that;

We try our best to supply PPEs to our health workers because we are aware of their relevancy in protecting health work not to be exposed to infections from patients. However, sometimes, due to limited funding, PPEs are not adequate and this demotivates and negatively affects the performance of health workers KII8.

This implies that there is inadequacy of PPEs at Kilembe hospital which demotivates health workers to perform their duties diligently.

Regarding the functionality of equipment. One of the key respondents was quoted stating that

*“Some of our equipment broke down long time ago. We are still waiting for funding from Ministry of Health to have them repaired. This is affecting service delivery at the hospital”.*K119.

This implies that some of the hospital equipment broke at Kilembe hospital and it is affecting service delivery.

The interpretation of both qualitative and quantitative data reveal that at Kilembe hospital all health workers follow uniform procedures and methods for performing tasks, the hospital provides comprehensive training on PPEs proper use and the MOH organogram is clearly defined in terms of lines of authority and responsibility. However, it was also found out that some of the hospital equipment were not functioning properly, there is inadequacy of PPEs at Kilembe hospital which exposes health workers to risks of contracting diseases from

patients, there are limited clear and ease to follow job aids at Kilembe hospital and that there is a breakdown in communication where management does not provide feedback to the officers about the operation of the system.

Hypothesis: Workplace safety significantly affects health worker performance at Kilembe Hospital, Kasese District, Uganda.

To establish the effect of workplace safety on health worker performance at Kilembe Hospital, the researcher considered the corresponding Standard Beta value for workplace safety. A Standard Beta value = 0.415 means that every one-unit increase in workplace safety shall lead to an increase of 0.415 units of health worker performance. The researcher therefore accepted hypothesis number 2 stated in chapter one and concludes that workplace safety had significant effect on health worker performance at Kilembe hospital.

Summary of Findings

The study findings established that there was positive moderate effect of workplace safety on health worker performance at Kilembe hospital. In particular, the positive effect implied that change in workplace safety contributed to 41.5% change in health worker performance at Kilembe hospital whereby prioritizing of workplace safety would cause improvement in health worker performance at Kilembe hospital and vice versa.

The study found out that at Kilembe hospital all health workers follow uniform procedures and methods for performing tasks, the hospital provides comprehensive training on PPEs proper use and the MOH organogram is clearly defined in terms of lines of authority and responsibility. However, it was also found out that some of the hospital equipment were not functioning properly, there is inadequacy of PPEs at Kilembe hospital which exposes health workers to risks of contracting diseases from patients, there are limited clear and ease to follow job aids at Kilembe hospital and that there is a breakdown in communication where management does not provide feedback to the officers about the operation of the system

Key finding from qualitative data was that there is inadequacy of PPEs at Kilembe hospital which exposes health workers to risks of contracting diseases from patients.

Discussion of the study findings

The study established that there was positive moderate effect of workplace safety on health worker performance at Kilembe hospital and the study findings concurs with Reese (2018), who observed that protecting health and safety of health workers include development of norms and standards for prevention of occupational risks in the health sector, provision of well-functioning equipment, developing and implementing occupational health programmes for health workers, provision of personal protective equipment (PPEs) and job aids.

Similarly, Reese (2018) supports the findings of the study by further indicating that protection of health workers from work place health hazards and injuries improves and sustains their motivation and enables health workers to perform effectively, making best use of their knowledge, skills and competences and the available resources in order to provide high-quality health services. Furthermore, Yassi et al., (2018) supports the findings of the study by observing that the fundamental function of workplace safety measures is to ensure that people stay safe and healthy in the workplace to increase worker's capacity to perform, and work safety standards instituted by organizations should aim at the promotion and maintenance of the highest degree of physical, mental, social wellbeing of workers in all sectors that have an impact on the health of employees and their performance.

Therefore, the study finding above principally follow the same line of argument with what other scholars had earlier established on the effect of workplace safety on health worker performance.

Conclusions

The study established that there was positive moderate effect of workplace safety on health worker performance at Kilembe hospital. The study therefore, concludes that prioritizing and adhering to workplace safety by the top management of Kilembe Hospital in form of having functional equipment, following Standard Operating Procedure (SPOs) adequate supply of Personal Protective Equipment (PPEs) to health workers, job aids and assigning them manageable work load would result into improvement in the performance of health workers at Kilembe hospital in terms of being available, productive, competent and responsive to patient's needs.

Recommendations

- i. There is need for Ministry of Health to advocate for budget increment in order to enable them supply enough PPEs to hospital
- ii. There is need for Government of Uganda through the Ministry of Health to partner with Civil Society Organization to fund some of the health budget for example repairing of hospital equipment.

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